The Origins of *freie Operationen*

by Major General Dieter Brand, German Army, Retired

In 1996, the Germans introduced a term to be used at the operational level of war—*freie Operationen* (loosely translated as "free operations"). However, the term was not clearly defined. Only some characteristics were mentioned, such as the use of space, the main effort, the estimate of the culminating point of the enemy's operation, deep operations and indirect approach. Although the term *freie Operationen* is generally not new in traditional German military thinking, it is, nevertheless, almost a novelty for today's German Army.

During the Cold War, when the highest concentration of nuclear and conventional forces on both parts of German soil occurred, senior German commanders were convinced that the basic *freie Operationen* concept could not help solve the problems of fighting within the cohesive forward defense along the inner German border. The concept seemed to be inapplicable, and neither the elements nor the term were taught to German general staff officers and, therefore, were almost forgotten.

Today, NATO allies are asking what the Germans mean by *freie Operationen.* The term is difficult to explain, because it cannot be directly translated into English. However, a translation such as "free operations" makes little sense, and the term "maneuver warfare" also does not encompass the entire meaning.

This same problem occurs with other typically German military terms such as *Auftragstaktik,* which is not fully translated by the words "mission-type orders." *Innere Fuehrung* cannot be translated at all. The problem is that these German terms comprise not only a specific meaning, but exemplify an entire philosophy of command and control and leadership. Let us, therefore, attempt to answer the question: If the elements of *freie Operationen* are essentially not new, what then is the background in German military history that could lead us to an understanding of the term? What are the origins of *freie Operationen?*

Even a superficial exploration of German military history literature, reveals that *freie Operationen* was once common terminology for officers educated in the operational art. They also spoke of *freies Operieren,* but the term is not found in early official doctrinal papers. The terms appeared in neither Field Marshal Helmuth Karl von Moltke's 1869 "Directives for Higher Commanders," the 1910-era "Characteristics of Command and Control on the Higher Level" nor the later field manuals—"*Truppenfuehrung*" of the *Reichswehr* and *Wehrmacht.*

The term *freie Operationen* was not used officially, but it was commonly used to characterize specific elements of operations and represented a philosophy of operations. Since military personnel seemed to have a good understanding of the term, it was not considered necessary to provide a comprehensive definition. However, this assumption risked having everyone understand it in slightly different ways.

One reason why it is so difficult to define the term is that some German military operations displayed all of the characteristics of *freie Operationen* but were not called such by their initiators. For instance, the German campaign against France in May 1940 is now considered by Germans to be the example of *freie Operationen.* Chief of Staff of the Army Group Erich von Manstein developed the basic ideas for that campaign, but he did not use the term in context with his concept of operations. Nevertheless, in his memoirs titled *Lost Victories*, he enumerates all of the characteristics of *freie Operationen* more or less in a self-explanatory manner.[1] This underlines the fact that the term has more of a general nature than a precise definition.

These circumstances might also explain why there is no term in German military literature that contrasts with *freie Operationen.* Would they be called "hampered" operations? If asking a *Reichswehr* or *Wehrmacht* general staff officer, what is the contradiction to *freie Operationen,* he would surely mention *frontale Operationen* (frontal operations) with the aim of attrition, but not because frontal is the opposite of free, which obviously it is not, but more because of the philosophy of *freie Operationen.*

Moltke

Up to the beginning of World War I, German general staff officers saw the operational level of war exclusively in the framework of *freie Operationen,* which always meant the "unrestricted use of space." The chiefs of the general staff, first Moltke and later Count Alfred von Schlieffen educated and impressed entire generations of general staff officers with this concept. However, understanding Moltke's use of the term *Operationen* requires understanding his view of the strategic conditions of a future war and what consequences he saw for the operational level of war. This understanding is necessary because philosophies of operational art are always bound to specific conditions of the time. Through time the character of *Operationen* is subject to development and change as well.

For Moltke there was no question that because of the confrontation of fundamental interests of the main powers in Europe—France, Great Britain, Russia, Austria and Germany—war in Europe was to be expected. Because of the demographic development as well as the effects of the industrial revolution, these powers would field large conscript armies.

In Moltke's assessment, the German *Reich*, precariously situated in central Europe and endangered should a two-front war occur, could never sustain such a large force over an extended period with manpower or logistics. For generations of German general staff officers this was the strategic framework for operational-level thought. They concluded that since avoiding war was not the task of the military, it was crucial to fight decisively, immediately take the initiative and dictate to the enemy *das Gesetz des Handelns*—the rules for action.

In Moltke's understanding, this challenge meant planning and controlling the movement of large army formations—corps and armies (forces)—in the area of operation (space) to concentrate all available forces at the day of the battle (time) out of different directions for one decisive battle, which should result in a quick decision. This new idea—the heart of *Operationen*—involved concentrating forces by maneuvering troops from different points against the enemy's front line and deep flanks just in time during battle.

This encirclement by *freies Operieren* before the battle was the essence of Moltke's thinking. Only *freies Operieren* could produce a swift decision necessary in the strategic context. Therefore, Moltke never considered protracted frontal attacks to attrit the enemy.

According to Moltke, the battle belonged to the tactical level of war. This leads to another fundamental aspect of Moltke's thinking. Because the battle should lead to a clear decision, it was essential to bring to bear all forces available even by taking great risks in other areas. "You can never be strong enough for the decision, and therefore the last battalion which can be made available should be concentrated," said Moltke.[2] Therefore, establishing a clear main effort where a decision is sought is a fundamental of traditional German military doctrine. To summarize: the coordination of forces in time and space oriented toward the common objective is the essence of command and control on the operational level. For Moltke, it was the essence of *freie Operationen.*

A third aspect of *freie Operationen* is Moltke's development of a new type of command and control. He was convinced that large maneuvering units could not be directed by short-span orders. Commanders needed general directives to pursue the common objective using their own initiative. This comprehensive system of control by general directives initiated the so-called *Auftragstaktik,* which cannot be separated from *freie Operationen* within traditional German understanding.

For Moltke, space was one element of operations that had to be fully used to direct army formations to final battle positions. The availability of space and the right of military commanders to make use of it were not to be questioned. Also, for subordinate commanders, it was essential to use space fully as a precondition of developing their own initiative.

In the traditional operational thinking of German general staff officers, the element of space played a central and decisive role. Chief of the General Staff of the Army of the *Wehrmacht* Colonel-General Ludwig Beck said, "If space is not available or granted—by what reasons so ever—the military strategy then must do without one of the very important parts of its art; that is, the art of operations."[3] That is, if space is not available, then operations are not possible. For Beck, the operational art, in accordance with Moltke's understanding, meant nothing else but the art of *freie Operationen.*

Although the unrestricted use of space was the first and decisive criteria of *freies Operieren*, Moltke and his successors were not dead-set on it. Instead, they opted for a pragmatic response to the problems in fielding mass armies—problems referred to in "Moltke's War Lessons."[4]

Moltke especially addresses the problems of sustaining large army formations and discusses the alternatives of concentrating all formations before the battle or the concentration just in time on the battlefield. He says, "[F]irst of all, all armies want to live, they need to eat and drink, they need rest as well as freedom for movement. Hundreds of thousands of people cannot live only out of magazines. . . . Nature itself . . . is opposed to all great accumulation of human beings all in one place. . . . Each accumulation is therefore by nature a calamity. It is justified and necessary if it leads to battle immediately. It is dangerous to divide it again when facing the enemy. And it is impossible to remain in it for a longer time."[5] Then follows the familiar sentence: "Circumstances will develop much more favorably if just at the day of the battle all forces are concentrated toward the battlefield from different directions; that is, if the operation could be controlled in such a way that only a short approach march leads into the flanks and the rear of the enemy at the same time. In this case, strategy will have done its best, and great results must be the consequence."[6]

Moltke had already expressed his views in his 1869 directives, but in his later historical studies he stresses the aspect more precisely and expands his view. In these studies it became clear that for his principle "divided approach, common strike" he not only contemplated the aspect of a quick, decisive battle, he also considered the reasonable logistic arguments evident in the quote: "[E]very concentration of large mass units is a calamity per se."[7] The idea of concentrating large army formations, after unhampered maneuvering out of different directions just in time against the front and especially the flanks of the enemy, displays the splendor of operational inspiration and yields, to a high degree, the very pragmatic or logistic viewpoints of that day.

Schlieffen

Chief of the General Staff Count Alfred von Schlieffen handed down Moltke's fundamental understanding of operational command and control to generations of general staff officers. However, over time he lost Moltke's pragmatic approach and concentrated more and more on the idea that the attack against the flanks, and particularly the rear, of the enemy was the essential lesson of all military history. Therefore, he was accused of being dogmatic, of rendering undue importance to encirclement operations.

Indeed, in his studies of the Battle of Cannae, Schlieffen concentrated exclusively on the idea of encirclement. He writes, "[The] enemy's front line should not be the objective of the main attack at all. The mass of own forces, as well as own reserves, should not be directed against the enemy's front. Instead, it is essential to hit the flanks of the enemy.

These flanks should not be seen only in the utmost ends of the front line but must be seen more in the entire depth of the deployment of enemy forces. The defeat of an enemy will be completed by the attack against his rear."[8]

In Schlieffen's view, Moltke exemplified this idea during the 1866 Battle of Koeniggratz and more so during the 1870 Battle of Sedan. In essence, these battles were similar to the ancient Battle of Cannae. Enemy forces were completely encircled in consequence of free maneuvering through space. Everything else, especially such victories resulting from direct and frontal attacks, were disqualified by Schlieffen as ordinary victories because in them operational art could not completely unfold. In this context, operational art meant *freie Operationen.*

Whatever approach one might take to put these ideas into an overall historical perspective, there is no doubt that Moltke and Schlieffen laid the basic understanding of *freie Operationen*. To them, the term meant maneuvering forces while making full use of space, getting quickly into the depth of the enemy, concentrating formations to attack the enemy's flanks and particularly his rear, thereby enveloping, then destroying enemy forces.

Beck

World War I caused deep frustration for all who adhered to Moltke's and Schlieffen's ideas on the operational level of war. However, one exceptional example proved Moltke's ideas. At the Battle of Tannenberg in East Prussia in August 1914, an outnumbered German force defeated two Russian armies. The battle is a good example of *freies Operieren* in which an outnumbered force used agility to outmaneuver the enemy and win.

However, frustration came soon. In the campaign against France, German forces, following the so-called Schlieffen Plan, were unsuccessful in reaching the enemy's deep flanks. After exhaustive marches and fighting, the operation came to a halt along the Marne River. Both sides established continuous front lines from the English Channel to the Alps. In addition, artillery and machineguns reached such a dominance on the battlefield that any further movement was denied. Moltke and Schlieffen never anticipated an area of operation completely filled by the mass armies of both sides, making it impossible to envelop the enemy's front line. Their concept of making full use of space to envelop the enemy no longer seemed applicable.

Beck, Chief of the General Staff of the Army of the *Wehrmacht* until 1938, mentioned in his reflections on World War I that the mass and fire power of modern armies posed a new challenge at the operational level of war—how to deal with continuous and combat-ready front lines. "Where opposing forces are deployed [within a] short distance of one another, so [that] they fill the entire area of operation, there will be no space for *freie*, quick and bold operations, and the battle must begin just from the basic line without having the possibility for *freies Operieren*."[9]

In such a situation, strategy must do without one of its most important elements—operational art. Obviously Beck remains squarely in the tradition of Moltke's thinking: when space is not available, operational art cannot be brought to bear, particularly not to its highest standard of *freie Operationen.*

World War I commanders, at least in the Western Theater, did not find a solution to this new challenge. They succumbed to the fallacy of attacking repeatedly against strong enemy positions while hoping that enemy losses would be greater than their own, such as at Verdun. This was nothing but attrition, which Moltke had rejected as wasteful and slow and Schlieffen had qualified as ordinary. Indeed Verdun is not only a contradiction but a perversion of operational art.

Seeckt

French army commanders were convinced that the dominance of fire would always favor the defender and, therefore, all thinking and training should concentrate on defense. After analyzing the events of World War I, the German military establishment under Colonel-General Hans von Seeckt's command, drew completely different conclusions.

Seeckt suggested that in a future war the German *Reich* would again be in the strategic situation of being outnumbered and unable to sustain a long-lasting war. Therefore, he believed that a small, highly professional army supported by an air force should immediately begin offensive operations, attempt to maneuver into the flanks of enemy formation, interfere with their concept of operation and avoid at all costs establishing continuous front lines.[10]

Nevertheless, if *freies Operieren* was not possible because of widestretched enemy positions, then the Germans would have to try another way to achieve their mission because a battle from the basic line always leads to a battle of attrition. German commanders wanted to avoid this quagmire at whatever cost. *Freies Operieren* could make full use of space and was the only chance to take the initiative and dictate events on the battlefield to ensure a quick, decisive result.

The solution was to employ a breakthrough operation by concentrating forces for a decisive action with a clear main effort. Enemy forces could be taken by surprise. While accepting risks in other sectors of the front, German forces could blow a hole through the enemy's front line—regardless of the danger to their own flanks—and immediately attack into the enemy's depth to interrupt lines of communication, then encircle and destroy enemy forces. Colonel-General Herman Hoth said that performing this quick advance into the enemy's depth is "a sin against the fundamental idea of the overall concept of operations to get involved by encounters."[11]

We now recognize the decisive development inherent in the philosophy of *freie Operationen.* Moltke and Schlieffen saw the sequence of events as deployment, maneuvering in space to outflank the enemy, and encirclement. The new sequence would be deployment, breakthrough battle, quick advance into the depth making full use of space and taking high risks, interrupt lines of communication, and encirclement.

Moltke saw *freies Operieren* coming before the decisive battle. For Seeckt, it would occur after the breakthrough. This new sequence was not mandatory; it only widened the spectrum of possible actions. Armored combat troops, in close cooperation with the air force, applied these new ideas during the German's May 1940 campaign in France.

Manstein

Moltke and Schlieffen understood *freies Operieren* only in the sense of strategic offense taking the initiative on the operational level to achieve quick results. Since the Battle of Tannenberg, and especially since the second phase of World War II, German thinking has concentrated on *freies Operieren* in strategic defense when the *enemy* initiates the action. In such cases, all elements of *freies Operieren* participate in so-called counterstroke operations. By using space as a lure and giving it up to the enemy, defenders draw him into the depth and overstretch his lines of communication. At the same time, forces would take greater risks in other sectors of the front. When enemy forces reached the culmination point, German forces would seize the initiative and launch a counterstroke.

The decisive aspect is that counterstroke forces should in no case be directed against the bulk of enemy formations. They should try to avoid encounters; maneuver into the depth of the enemy, while taking greater risks for the flanks of their own advancing forces; cut off the enemy's lines of communication; then encircle and destroy him. All elements of *freies Operieren* would come to bear on the enemy force.

Schlieffen taught that the mass of enemy forces would not be the main objective. Hoth believed it a sin against the basic idea of the operation to get involved in encounters. From Moltke's viewpoint, the decisive point was to quickly reach the deep flanks and the rear of the enemy. Some German field commanders called this type of operation "counter-pursuit." The most famous example is Manstein's counterstroke operation in February 1943 south of Charkow. As a consequence of the disaster of Stalingrad, two German army groups were in danger of being cut off by a bold, deep offensive operation conducted by Soviet forces. The Germans were outnumbered, but Manstein took the initiative and turned the overall situation to his advantage.

These events, especially those at the Eastern Front, enforced a questionable conviction among German field commanders and general staff officers that, given the possibility for *freies Operieren,* force ratio did not play a decisive role. Executing the highly developed operational art with motivated troops led by highly qualified leaders, the force ratio could nearly be neglected. But again, this questionable argument is valid only under specific conditions, when the quality of the enemy is known.

The Future of *freie Operationen*

Can *freie Operationen* philosophy be helpful in solving future problems? In the past, *freie Operationen* focused exclusively on ground forces maneuvering large ground formations making full use of space. However, there is no mention that air superiority must set the conditions for ground forces to concentrate and maneuver. Also, *freie Operationen* concepts do not include joint forces or anticipate the complexity of modern operations.

The aim of this article is not to show how *freies Operieren* elements can help solve future problems. Its aim is simply to identify the origins of *freie Operationen.* But the idea of *freie Operationen* should not remain mothballed. On the contrary: we must realize that the last example of an encirclement operation making full use of space occurred just recently.

The latest "Cannae" in military history was Operation *Desert Storm*, about which US General Norman Schwarzkopf has said: "The textbook way to defeat such a force; that is, the entrenched infantry and the mobile operational reserves in the depth of the Iraqi positions, would have been to hold it in place with frontal attack while sending an even bigger army to outflank it, envelop it and crush it against the sea."[12] And that is exactly what he did. ***MR***

NOTES

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2. Helmuth von Moltke, *War Lessons: The Battle* (Berlin: Mittler and Sohn, 1911), 6.
3. Ludwick Beck, *Studies: Germany in an Upcoming War* (Stuttgart: General Dr. Speidel, 1955), 64.
4. Moltke, *War Lessons: The Tactical Preparation of the Battle* (Berlin: Mittler and Sohn, 1911), 102.
5. Ibid.
6. Ibid.
7. Ibid.
8. Alfred von Schlieffen, *Gathered Writings I, Cannae* (Berlin: Mittler and Sohn, 1913), 29.
9. Beck, *Studies: Strategy* (Stuttgart: General Dr. Speidel, 1955), 82.
10. Hans von Seeckt, *Thoughts of a Soldier: Modern Armies* (Berlin: Verlag fur Kulturpolitik, 1929), 94.
11. Hermann Hoth, *Panzer Operations* (Heidelberg: Kurt Vowinckel Verlag, 1956), 24.
12. Norman Schwarzkopf, *It Doesn't Take a Hero* (New York: Bantam Books, 1992), 362.

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Under the Gun: Training the American Expeditionary Forces, 1917-1918

by Colonel William O. Odom, US Army

Immediately preceding World War II, US national policy sought to avoid entanglement in European affairs. Accordingly, military strategy focused on coastal defenses, patrolling the Western Hemisphere and protecting the United States' few overseas possessions. In early 1917, the situation changed dramatically with the adoption of a hard-line policy toward German submarine attacks. The declaration of war on Germany found the United States at a greater disadvantage than at any time in its history, despite passage of the National Defense Act of 1916, the birth of a popular preparedness movement and the conduct of military operations on the Mexican border.[1]

The successful mobilization of US national resources decisively influenced the war's outcome. The United States's awesome war-making potential cast a foreboding shadow on the *Reich*'s future. Germany's strategic underestimation of the quantity and quality of US fighting forces prominently figured in its defeat, despite the fact that US forces arrived in France with little training beyond physical conditioning and drill.

State of Preparedness

In April 1917, the US Army's ability to influence the war in Europe

appeared negligible. The Regular Army consisted of 38 infantry regiments, 17 cavalry regiments, 9 artillery regiments and 3 engineer regiments, most of which were at least one-third undermanned. No divisions existed. The National Guard numbered only 182,000—less than one-half the number that had died in a single day on the Western Front.[2]

European armies were armed with machineguns and automatic rifles—100 in each regiment. In contrast, the US Army lacked most of the new weapons of trench warfare. Mortars, hand grenades, howitzers, tanks, 37-millimeter guns and gas masks were not in the Army inventory. Infantry regiments manned only four machineguns, the dominant weapon in close combat in Europe. Procuring and testing a new standard machinegun was a low priority. Also, the National Guard mobilization in response to the Mexican border crisis in 1916 had depleted stocks of many individual issue items such as uniforms and helmets.[3]

Training consisted of drill, some rifle marksmanship, physical conditioning and inspections. Maneuvers involved no more than battalion-size units. The duty day usually ended by noon to escape the afternoon heat. Selected officers studied at the Leavenworth schools and acquired excellent staff skills; many more played cards and rode horses to pass the boring days in an Army garrison. With the exception of Philippine Campaign and Mexican Punitive Expedition veterans, few men had experienced combat. None had seen combat like that on the Western Front.

The General Staff was divided and weak, and its Congressional opponents undercut what effectiveness it had by strictly limiting its numbers. The tiny 19-man war-planning staff necessarily focused on the immediate crises in Mexico to the neglect of contingency planning for operations in Europe.[4]

The declaration of war against Germany on 6 April 1917 surprised few. But, US President Woodrow Wilson had refused to prepare openly for war. He naively hoped that US threats would deter the Germans from continuing unrestricted submarine warfare. Consequently, US mobilization began from a standstill.

Mobilization Challenges

Providing personnel presented no problem. After brief debate, Wilson approved conscription and volunteering to meet the manpower requirement. The draft eventually provided 67 percent of the troops.[5] Training and equipping the rapidly expanding force was not as easy. Initial estimates placed the projected US contribution at one million men; over three times that number were serving by 1918.

General Staff planning only addressed manpower mobilization; its neglect of economic and industrial mobilization planning meant the US could not adequately equip the forces bound for Europe. The fine US-made Browning automatic weapons and Springfield rifles did not arrive in Europe until July 1918. Only 100 of the 2,250 field guns US forces used were US-made.[6] The Allies provided most of the artillery.

The challenge of quickly training one million men for war was equally demanding. The original goal was to train one-and-one-half million men before they were shipped to France. The General Staff War College Division considered using Regular Army and National Guard officers as cadre for the new recruits and levies. The accelerated need for a US presence altered the plan.[7]

Through intensive training, the Army attempted to compress the one to two years believed necessary to train a soldier into four months. Soldiers drilled, marched, performed calisthenics, attended classes and served on inevitable details for 17 hours a day, 6 days a week.

Stateside training faced numerous obstacles. The large number of non-English-speaking draftees, possibly as high as 18 percent of the total, in many instances limited the quality of training. Equipment shortages of all kinds further hindered preparation. And, at many camps, the harsh winter of 1917-1918 degraded training.[8] As late as June 1918, some men arrived in France without having fired a rifle.

Officer training, similar to troop training in its emphasis on physical hardening and the development of discipline through drill, marches, school of the soldier and marksmanship, was little better. Officers also trained in scouting, patrolling and tactics, although shortages of training aids and equipment often marred training. Despite such inadequacies, officer training camps provided nearly half of the Army's officers.[9]

The disastrous result of the Nivelle Offensive, led by French General Robert Nivelle, was approximately 120,000 casualties. The offensive brought a cry for the immediate deployment of a US division. The hurried departure of the newly assembled 1st Division meant it would have to be trained in France. Such hasty creation and deployment of divisions became the norm for the remainder of the war. Therefore, few units or individuals completed training before embarking for France.

Pershing on Training

US General John J. Pershing was responsible for leading and training the American Expeditionary Forces (AEF). Wilson and Secretary of War Newton D. Baker gave Pershing nearly limitless authority. Baker told Pershing that he would receive only two orders from him—one to go and one to return. "The decision as to when your command, or any parts of it, is ready for action is confided to you."[10]

Pershing typified the general officer in many of the major armies of his day. He was a strict disciplinarian, valiant in combat, a die-hard cavalryman and wedded to the belief that there was nothing new under the sun. He agreed with most Regulars that training a soldier to meet Regular standards required over a year. His approach to training reflected his conservatism.

Pershing noted that the Allies seemed convinced that with the advances of new technology, the principles of war had changed. They were preoccupied with defense. The French, in particular, exclusively emphasized trench warfare. Pershing reasoned that France's past experiences defending against the Germans reinforced their belief in trench warfare. The "resultant psychological

effect . . . obscure[d] the principles of open warfare" and committed the combatants to a war of attrition. It was Pershing's opinion that "the victory could not be won by the costly process of attrition, but must be won by driving the enemy out into the open and engaging him in a war of movement. Instruction in this kind of warfare was based upon individual and group initiative, resourcefulness and tactical judgment, which were also of great advantage in trench warfare. Therefore, we took decided issue with the Allies and, without neglecting thorough preparation for trench fighting, undertook to train mainly for open combat, with the object from the start of vigorously forcing the offensive."[11]

After the war, Pershing wrote that the Allied emphasis on trench warfare and neglect of open warfare techniques increased the success of the German breakthroughs in 1918. Even those units that had adopted the defense-in-depth, he added, lacked the open warfare skills to exploit its advantages in the counterattack.[12]

Pershing's precise definition of "open combat" is not clear. He did not address the specifics of his ideas beyond insisting on offensive action to break the trench stalemate. It is doubtful that Pershing could have developed a full appreciation for the weapons of modern warfare through previous experience. For him, the enemy army remained the real objective, the principles of war remained unchanged and the infantry remained the principal weapon of war.[13]

Pershing advocated aggressive, offensive, infantry action with heavy reliance on rifle marksmanship and the bayonet. He believed the Allies wrongly subordinated the rifle to the hand grenade, machinegun and indirect fire. All "were valuable weapons for specific purposes but they could not replace the combination of an efficient soldier and his rifle."[14] Personal discipline enhanced a soldier's proficiency with his weapon. Personal discipline, to a Regular like Pershing, began with a firm grounding in military courtesy, customs and bearing. Simply put, a soldier who looked like a Regular might fight like a Regular.[15] The combination of discipline and weapons proficiency was the foundation of the AEF training program.

Training Program and School System

Pershing complained about the inadequate preparation of incoming soldiers throughout the war. In messages to the War Department, he specifically stated the requirements for officers with staff skills. He also repeatedly emphasized the need to train soldiers in rifle marksmanship skills, the school of the soldier and open warfare techniques. He never accepted the War Department's excuses for shipping untrained and improperly trained officers and men. Nor did he understand the War Department's continued emphasis on training for trench warfare in spite of his call for soldiers trained in open warfare techniques.

Pershing's dissatisfaction with stateside training increased as urgent requests for replacements at the front forced him to abbreviate, and in some cases eliminate, local training. In many cases, unskilled officers and men who had never fired a rifle went directly into the line.[16]

The design of the AEF training program was influenced by the military importance of a strong American showing in its first battle, professional concern for the thorough preparation of his force, the aforementioned state of unpreparedness and Pershing's personal conservatism. As early as August 1917 Pershing underlined the criticality of training by separating the Training Section from the Operations and Training Division of the General Staff.

In February 1918, the Training Section became the fifth section of the General Staff—G5. Its sole responsibility was to plan and supervise training. Pershing assigned Colonel Paul B. Malone, assisted by Colonel Harold B. Fiske, to head the new training section. Pershing clearly believed that "the most important question that confronted us in the preparation of our forces of citizen soldiery was training."[17]

The Training Division's plan envisioned a six-division corps composed of four combat divisions, a depot division and a replacement division. The depot division, located at the ports, received new soldiers and provided six weeks of basic individual training before forwarding them to the replacement division. The demand for combat divisions quickly reduced the number of depot divisions from six to two. These two depot divisions, the 41st and 83d, processed all of the AEF replacements. The replacement division trained men of all ranks and forwarded them to combat units as required.[18]

The AEF school system consisted of Army and corps schools. Originally organized by General Robert L. Bullard and Colonel James W. McAndrews, the schools provided training centers for individuals and units up to division level, replacement training centers, corps schools for commanders and noncommissioned officers (NCOs), a general staff college, instructor training for the corps schools, officer candidate training, branch skills training and instruction for staff and department specialists.

Ideally, the AEF schools were to provide three months of training to supplement that received stateside. The soldiers were to learn the special skills required in modern warfare—familiarity with new weapons systems, new communications techniques and new staff skills. The Army schools focused on training instructors, expecting graduates to return to units and impart their newly acquired knowledge to the troops through unit training and as instructors in corps schools. The schools graduated 21,330 NCOs and 13,916 officers during the course of the war. Of these soldiers, over 12,000 received commissions through officer training programs. Pershing's willingness to take the best officers out of the line to attend and administer the schools emphasizes their importance in his training scheme.[19]

The division training program—the basic unit training course—strove to incorporate the best features of British and French systems. The French emphasized trench warfare almost exclusively. The British emphasized trench warfare, but they also trained to develop confidence in

individual fighting prowess through aggressive hand-to-hand combat.[20]

The division training program consisted of three phases, each lasting approximately 30 days. In the first phase, the division reviewed elementary drill and tactical exercises. French and British instructors conducted training in trench warfare and introduced the troops to trench fighter's tools of war—the gas mask and flamethrower among them. In the second phase, under French control, one battalion per regiment spent 10 days occupying a quiet sector of the front. The last phase consisted of combined arms maneuver exercises with artillery and aircraft in support of infantry. The division then moved to the front.[21] Throughout training, the G5 Section strove to balance the French emphasis on defense with US practices of rigid discipline, rifle practice and instruction in open warfare.[22]

AEF Division Training

The 1st Division, the first unit to undergo training in France, was formed from four Regular infantry regiments. Two-thirds of the division was composed of new recruits.[23] Even the seasoned soldiers, fresh from duty on the Mexican border, had never seen or heard of the weapons and equipment with which they were to fight.[24] That the 1st Division ranked among the best-prepared units underlines the challenge the AEF commander faced.

The 1st Division's training exemplifies the division program. Within days of debarkation, the division moved to Gondrecourt to begin training. To prepare the troops for trench warfare, training began with "a heavy dose of physical conditioning and drilling."[25] Pershing directed strict personal disciplinary policies, forbidding consumption of strong alcohol and making contraction of venereal disease a court-martial offense.[26] To many, soldiers of the 1st Division represented the last hope; Pershing wanted to ensure they could live up to every sense of that expectation.

The elite French Chasseurs Alpine, the 47th Division Blue Devils, conducted trench warfare training. The Americans dug a major trench complex in Gondrecourt and smaller systems in each of the local training areas. They trained for eight hours a day, six days a week, to master trench fighting skills from individual through battalion level. The method of instruction consisted of a demonstration of the task by the French followed by a US attempt to imitate them. The infantry learned to construct, occupy, defend and resupply trench systems. Training included use of rifles and hand grenades, air-ground communications techniques, trench observation devices, pyrotechnic signals, positioning and employment of key weapons and distribution of men. The French introduced the Americans to the 37-millimeter gun, trench mortar and the Chauchat automatic rifle. At Pershing's insistence, training incorporated rifle and bayonet practice. Night exercises, use of imitation gas and the uncomfortable weather conditions heightened training realism.[27]

Machinegunners, who trained separately at first, received one week of mechanical training and crew drill before advancing to site selection, occupation of a position and dry fire training. They also practiced relief in place, firing final protective fires and selecting alternate and supplementary positions before live firing.[28]

Artillerymen, trained separately until the third phase, learned all aspects of operation and maintenance of the French 155-millimeter and 75-millimeter guns. By the second week of training, crews fired every morning. In the afternoon, the cadre led critiques of the morning's shooting. Liaison officers and aerial observers attended special classes. In the fourth week, the men conducted fire missions without cadre assistance. Throughout training, the artillery units road marched daily to maintain the condition of the men and horses. After seven weeks, training was complete.[29]

Support arms received special attention. Engineers constructed field fortifications and emplaced and breached wire obstacles. They also practiced infantry skills. Signalmen trained with French equipment, visiting the front to observe techniques for communication and liaison. Training included codes and ciphers, use of wireless sets, telephone construction and maintenance and switchboard operations.[30]

French liaison officers supplemented unit staffs at all levels. US staff officers visited French divisions at the front to observe procedures and attended the special French, British and AEF schools. Training support and preparation of practice orders provided additional training.[31]

The 1st Division completed the first phase of training in October. French instructors noted the following US deficiencies: tendency to neglect logistics and liaison, poor coordination of artillery, poorly sited machineguns and bunching up during assaults.[32] The same shortcomings resurfaced repeatedly in the battles of 1918.

On 21 October, the first US battalions entered the trenches in the Sommerville sector under the control of the 18th French Division. In addition to defending the trench, the battalions patrolled and emplaced wire obstacles in "no man's land." While in this "quiet" sector, the Americans tasted first blood, mostly their own. Before the 30 days ended, casualties amounted to 36 killed in action, 36 wounded in action and 11 taken as prisoners of war. The short-term occupation of the trenches brought home the realities of combat—fear, casualties, physical discomfort and boredom.[33]

In the third phase of training, the division united for the first time and conducted open warfare maneuvers at the battalion level and above. Combined arms operations—infantry, artillery, signal, engineer and combat trains—received particular attention. Tanks were notably absent. Conducted at night and often in gas masks, the training was demanding and realistic. The exercises primarily focused on providing commanders and staffs with opportunities to maneuver large bodies of troops. One soldier reportedly remarked, "I wish we could get through educating these officers."[34] In January the 1st Division entered the line.

The 42d, 26th and 2d Divisions arrived before the end of the year and began training. These divisions mirrored the 1st Division's high percentage of new recruits.[35] However, the

training they received differed somewhat from the original program.

As early as fall 1917, Pershing's dissatisfaction with French and British training led to program modifications. Staff observers criticized the failure to emphasize open, mobile warfare in accordance with the commander's desires. However, the Allies could not hide their pessimism. After three years of seemingly insignificant fighting, the exhausted and demoralized trainers could hardly inspire the aggressive offense spirit that Pershing believed was essential to success. "After considerable experience, it was the inevitable conclusion that, except for the details of trench warfare, training under the French or British was of little value."[36] Pershing concluded that Americans needed to take the lead in training.

To this end, Pershing published "General Principles Governing the Training of Units of the American Expeditionary Forces."[37] The principles emphasized the correctness and value of US doctrine and training methods used before the war—the primacy of the offensive, the supreme importance of the rifle and bayonet and the criticality of discipline. Pershing urged the War Department to stress open warfare in stateside training, believing that once in France soldiers could learn trench warfare skills in a relatively short period of time and with greater ease.[38]

Although the division training program and AEF schools continued throughout 1918, increased demands for manpower forced the curtailment of much of the training. Circumstances at the front necessitated reducing the three-month course to four weeks or less.[39] Especially significant, abbreviated programs usually eliminated the third phase of training in which the only combined arms maneuvers took place. The Meuse-Argonne offensive ended any ambitions for sustaining slow, methodical training. Thereafter, the infinitely faster process of providing replacements to trained divisions took priority over training divisions as a unit. The lack of a well-defined replacement system meant that personnel managers skeletonized incoming divisions to provide needed manpower. By mid-1918, the division training program had all but disappeared. As a result, most US divisions lacked operational and tactical skills.

Training Effectiveness

Victory and defeat do not necessarily measure strategic, operational or tactical effectiveness. There are other ways to measure training effectiveness. For example, an evaluation of a unit's ability to execute tactical doctrine is the fundamental measure of training effectiveness. Whether or not the doctrine is correct does not matter. Employing the correct doctrine increases the chance of battlefield success and can make troops appear better trained than they actually are.

Conversely, perfect execution of the wrong doctrine can make well-trained troops appear worse than they actually are. Ineffective training produces troops who cannot execute tactical doctrine. Adequately trained troops execute doctrine but lack the flexibility and initiative to modify it. The best-trained armies adapt doctrine to meet battlefield realities. By applying these definitions to AEF units' performance, it can be concluded that they were adequately trained. However, although they executed US doctrine, they never displayed the ability to adapt to changes signaled by battlefield experiences.

Individual soldier training supported offensive-minded US doctrine. The spirit of the bayonet pervaded all training and encouraged the soldier to perform bravely, almost recklessly, in the face of battle. The French, British, Australians and Germans commented on US troop bravery, stamina and spirit, but noted the tendency to cluster in the attack. For this they blamed faulty US leadership and training.[40] American bravado, typically displayed by fresh, optimistic, but inexperienced soldiers, also explains their common tendency to attack machinegun nests frontally.[41] The individual soldier was well-trained for aggressive action.

Although unit training reflected US tactical doctrine, unit performance often did not. However, US divisions performed adequately in the defense. Allied trench defense techniques combined with US offensive spirit proved strong enough to meet the rapidly weakening German attacks. The 1st and 2d Divisions, probably the best US divisions, drew frequent praise from French commanders. In fact, the French Second Army commander remarked that the 2d Division was as efficient as any of his French divisions.[42] And even the Germans expressed surprise at the 2d Division's tenacious fighting ability at Chateau Thierry. The stand of the 38th Infantry, later known as the "Rock of the Marne" Regiment, demonstrated US resolve in the defense.[43] The US emphasis on individual discipline, marksmanship, physical conditioning and aggressiveness produced troops who were well-prepared to defend.

Offensive operations exposed major US weaknesses in training, however. Faulty doctrine is the blame for some problems. The doctrinal neglect of tanks, gas and aircraft led to their neglect in training and, inevitably, to their neglect in combat.[44] Tanks rarely participated in maneuvers and then only in small numbers.

The French regularly incorporated simulated gas attacks into the 1st Division's initial training. Yet, gas still caused between one-fourth and one-third of all combat casualties. Not until November 1918 did US troops begin to display an understanding of chemical warfare.[45]

Also, US doctrine made poor use of artillery and placed little stress on logistics, liaison and communications, all of which French instructors noted while training the 1st Division. In combat, these deficiencies resurfaced time after time. Even as late as the Meuse-Argonne Offensive, US forces tended to outrun logistic support and lose contact with the artillery and adjacent units.[46] The most experienced divisions had begun to overcome these problems by the fall of 1918. Overall, US units were aggressive, if not well-trained for offensive action.

Had the AEF fought longer, it might have demonstrated a greater capacity to learn from tactical experiences. Indeed, some units, especially the 1st and 2d Divisions, trained when not in the line and

strove to correct deficiencies. Some units had begun to modify doctrine to fit battlefield reality. However, these modifications took place at regimental level and below. The upward transmission of battlefield experience from the trench to the General Headquarters, so successfully exploited in the German Army, did not occur even though Training Section observers recorded and disseminated combat lessons.

US officers' training was rushed and uneven. The few Fort Leavenworth graduates ranked with the best commanders and staff officers in any army, yet they were a glaring exception to the rule. Officer Training Centers in the US and France produced approximately 200,000 young leaders through programs remarkably similar to recruit training. Only one percent of all company commanders had over one year of experience.[47] Senior leaders assumed that inexperienced, poorly-trained junior officers lacked the initiative and expertise to execute ambitious, highly mobile, decentralized operations. As a result, AEF operations orders required strict adherence to timetables, boundaries and limits of advance. The AEF General Headquarters' tight rein on operations prevented the citizen-officer from demonstrating his capability for bold action.

Conclusions

The political desire to preserve an independent US force, the political-military importance of a strong debut and the US Army's prewar unpreparedness necessitated an extended training program for pioneer divisions. The slow, methodical approach to training ensured the best US showing possible, even if it meant the Allies would have to suffer alone a little longer. The pioneer divisions' superior performances, compared with those of later units, attest to training's benefits. The program appears initially to have served its purpose well.

Pershing's approach to training had its weaknesses, however. The Training Section's detailing of men for instructor duty and to attend courses disrupted unit training and drew the ire of commanders at all levels. For example, just as the 1st Division began regimental training, Pershing ordered nine out of the 12 battalion commanders to attend courses at the Staff College.[48] Similarly, companies sometimes lost their best NCOs to AEF schools.

Pershing's insistence on withholding US forces until four divisions completed the time-consuming training program significantly delayed the impact of a US presence in Europe. Despite the Allies' urgent cries for assistance, a US division did not occupy a position on the front line until nine months after war was declared.[49]

Chief of Staff of the Army General Peyton C. March and other officers argued that US divisions could have performed just as well without as much additional training. March concluded that the men serving in Europe were of higher quality than the average peacetime soldier and, "filled with enthusiasm for what they regarded as a righteous cause . . . , threw themselves into the training with a zeal and enthusiasm which produced results in a very short time."[50]

The delay in using US manpower not only discouraged the desperate Allies, it damaged US soldiers' morale: "The practical effect of Pershing's policy was that large bodies of American troops, whose morale was at the highest point, who had had from four to six months' training, and often more in camps in America, and who expected on arrival in France to be thrown into battle immediately, found the keen edge of their enthusiasm dulled by having to go over again and again drills and training which they had already undergone in America."[51]

Pershing also sought to apply the tactical doctrine of the mobile offensive as described in Army regulations. The doctrine under-emphasized machineguns, artillery and motor transport and totally ignored gas, tanks and aircraft.[52] Even if US units could execute the doctrine—and they could not—US expertise with rifle and bayonet alone would not have changed the outcome. Stressing open warfare over trench warfare techniques produced a US casualty rate much higher than that of the Allies.

By the summer of 1918, the demand for replacements left skeletal divisions after providing needed manpower. The surprisingly adequate performances of the new soldiers, when compared with veterans, suggests that an expanded replacement training system would have worked earlier. By implementing an effective replacement system, Pershing could have provided trained soldiers to the veteran divisions while permitting new divisions to complete training.

Ultimately, the division training program and AEF schools successfully prepared the first US divisions for their critical debut in the trenches. The training system also built a base of US expertise on which newly arriving troops could draw during the rest of the war. However, the German offensives in 1918 created an emergency and minimized time available for methodical preparation of divisions for combat. By the time of the Meuse-Argonne Offensive, the pressing need for replacements in the committed divisions shifted emphasis from time-consuming, individual and unit training to on-the-job training in the trenches. The training system did not adapt to the changing requirements. As a result, most of the AEF learned more from its combat experience than from the AEF schools or the division training program. ***MR***

NOTES

1. Russell F. Weigley, *History of the United States Army* (New York: Macmillan, 1967), 352-53.
2. Edward Coffman, *The War to End All Wars* (New York: Oxford University Press, 1968), 48; Weigley, 356-57.
3. Ibid., 32, 38; Weigley, 356.
4. Coffman, 11-19, 42; Weigley, 353.
5. Weigley, 357-59.
6. Ibid., 360-63.
7. Ibid., 356.
8. Coffman, 64-66; Weigley, 374.
9. Coffman, 55.
10. Weigley, 377, 381.
11. John J. Pershing, *My Experiences in the World War,* 1 (New York: Stokes, 1931), 152.
12. Ibid., 355, 368.
13. Ibid., 11-12; Weigley, 391.
14. Ibid.
15. Weigley, 375.
16. Pershing, 150-156, 181, 258, 264-65, 379-80.
17. Ibid., 150; General Headquarters AEF, "Final Report of G-5," 30 June 1919, in US Department of the Army, Historical Division, *United States Army in the World War, 1917-1918,* 17 vols (Washington, DC: Government Printing Office (GPO), 1948), 14:289. Hereafter called "G-5 Final Report."
18. G-5 Final Report, 290-91, 437.
19. Coffman, 137; Pershing, 150-56; Weigley, 387; Robert L. Bullard, *Personalities and Reminiscences of the War* (Garden City, NY: Doubleday, Page and Company, 1925), 59-60; US War Department, *Final Report of Gen. John J. Pershing* (Washington, DC: GPO, 1920), 13-15; G-5 Final Report, 290-91.
20. Pershing, 151.
21. Coffman, 138-39; Pershing, 264-65; Weigley, 375.
22. Pershing, 194.

23. George C. Marshall, in *Memoirs of My Services in the World War, 1917-1918* (Boston: Houghton Mifflin, 1976), describes the state of discipline of many 1st Division soldiers. He relates an episode in which a French general approached a US sentry in front of Major General William L. Sibert's quarters. The general wanted to examine the soldier's rifle. The sentry, standing with blouse unbuttoned and a watch chain draped between his front pockets, handed the weapon to the general then squatted on the doorsill while it was inspected. Marshall claims to have made an on-the-spot correction.
24. Weigley, 356.
25. Coffman, 132, 135.
26. Ibid.
27. Coffman, 135-37; The Society of the First Division, *History of the First Division in the World War 1917-1919* (Philadelphia: Winston, 1922), 19-21. Hereafter called "First Division."
28. First Division, 22-23.
29. Ibid., 26.
30. Ibid., 24.
31. Ibid., 26.
32. Coffman, 135-37.
33. First Division, 27-32.
34. Coffman, 141; First Division, 35-41.
35. Coffman, 151; Weigley, 376.
36. Coffman, 138; Pershing, 114; Weigley, 389.
37. Pershing. No Publishing information available.
38. G-5 Final Report, 304-07, 320-21.
39. G-5 Final Report, 301.
40. Coffman, 237, 246, 260.
41. Ibid., 253-255.
42. Pershing, 382.
43. Coffman, 221-22, 226.
44. Ibid., 313.
45. Timothy K. Nenninger, "American Military Effectiveness in the First World War," in *Military Effectiveness,* eds. Allan R. Millett and Williamson Murray, 1 (Winchester, MA: Allen and Unwin, 1988), 139.
46. Coffman, 305, 338, 344.
47. Weigley, 373.
48. Coffman, 138; First Division, 35; Marshall, 15.
49. Weigley, 371-72.
50. Peyton C. March, *The Nation at War* (Garden City, NY: Doubleday, Doran and Company, 1932), 255-60. March's book appeared the year after Pershing's *My Experiences*. In his book, March responds to Pershing's criticisms of the War Department, defending it (and himself) and counterattacking Pershing's management. The reader must accept March's comments, like Pershing's, in the context of their feud. Other officers, US General Douglas MacArthur, for one, support March's assessment.
51. March, 258.
52. Nenninger, 134.

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